

**REMARKS**

Upon entry of the present Amendment, claims 1-4 and 6-17 will be pending, of which claims 1, 2, 4, 6-10 and 13-17 will have been amended, and claim 5 will have been canceled. Applicant notes that claim 4 will have been amended to include *inter alia* the elements of original claim 5, and claims 1, 6-8 and 13-17 will have been amended to further clarify aspects of Applicant's invention. Moreover, claims 9 and 10 have not been amended to narrow the scope of the claims. Rather, claims 9 and 10 have been amended to improve the language of the claims. Also upon entry of the present Amendment, a new Abstract of the Disclosure will have been provided for the Examiner's consideration. Applicant respectfully submits that claims 1-4 and 6-17 are in condition for allowance.

In view of the herein contained remarks, Applicant respectfully requests reconsideration and withdrawal of all rejections together with an indication of the allowability of all the claims pending in the present application in the next Official communication. Such action is respectfully requested and is believed to be appropriate and proper.

Applicant notes with appreciation the Examiner's consideration of the documents cited in the Information Disclosure Statements filed on March 9, 2005, July 26, 2005, September 26, 2006 and February 27, 2007 in the present application. Applicant thanks the Examiner for returning, with the above-noted Official Action, initialed and signed copies of the Forms PTO-1449 that accompanied the March 9, 2005, July 26, 2005, September 26, 2006 and February 27, 2007 Information Disclosure Statements.

Applicant also notes with appreciation the Examiner's acknowledgement of Applicant's claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f), as well as confirmation of receipt of the copies of the certified copies of the priority documents from the International Bureau.

Applicant notes that the Examiner has not objected to the drawings. In the absence of an indication to the contrary, Applicants assume that the drawings filed December 17, 2004 are accepted, and no further action is required on the part of the Applicant with regard to the drawings.

In the above-mentioned Official Action, claims 1-17 are rejected. In particular, claims 4 and 13-17 are rejected under 35 U.S.C. § 102(b) as being anticipated by KEYES et al. (U.S. Patent No. 3,710,666). Claims 4 and 6-8 are rejected under 35 U.S.C. § 102(b) as being anticipated by HIDEO et al. (Japanese Publication No. 2000-051966). Claims 5 and 9-12 are rejected under 35 U.S.C. § 103(a) as being obvious over KEYES et al. in view of BEZAMA et al. (U.S. Patent No. 5,907,985). Claims 1-3 are rejected under 35 U.S.C. § 103(a) as being unpatentable over HIDEO et al. Applicant traverses each rejection and requests reconsideration and withdrawal of the same. Further, Applicant respectfully requests an indication of the allowability of claims 1-4 and 6-17 in the next Official communication for at least the following reasons.

Regarding the rejection of claims 4 and 13-17 under 35 U.S.C. §102(b) based on KEYES et al., each of claims 4 and 13-17 will have been amended, i.e., upon entry of this Amendment, to recite the die mounting hole being provided with a seal member at its upper portion and its lower portion that prevents compressed fluid from leaking. KEYES et al. do not disclose, teach or suggest, *inter alia*, a die mounting hole being provided with a seal member at its upper portion and its lower portion that prevents compressed fluid from leaking. Accordingly, because KEYES et al. do not disclose each and every element of claims 4 and 13-17, withdrawal of the rejection under 35 U.S.C. §102(b) based on KEYES et al. is respectfully requested.

For example, referring to FIG-2, KEYES et al. disclose a removable die button 25 that is press-fitted into a die retainer 11 (*see* column 3, lines 63-65). KEYES et al. explicitly teach, e.g., at column 3, line 65 to column 4, line 6, that button 25 “is formed with a generally cylindrical configuration and is designed to have a length such that, when properly inserted, its flat planar ends will lie respectively in the planes defined by the plate surfaces 15 and 16 of plate 11.” KEYES et al. do not disclose or teach the aperture 17 in the plate 11 (which the Examiner equates to the claimed die holder) to be provided with a seal member at its upper portion and its lower portion, as recited in, e.g., each of claims 4 and 13-17. Moreover, since the die button 25 is press-fitted in each aperture 17 in plate 11, KEYES et al. do not suggest providing the plate 11 with a seal member at its upper portion and its lower portion.

Thus, because KEYES et al. do not disclose each and every element of claims 4 and 13-17, Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. §102(b) based on KEYES et al.

Regarding the rejection of claims 4 and 6-8 under 35 U.S.C. § 102(b) based on HIDEO et al., upon entry of this Amendment, claim 4 will have been amended to recite the die mounting hole is provided with a seal member at an upper portion and a lower portion which prevents the compressed fluid from leaking, and claim 6 will have been amended to recite an inclined surface formed at an outer peripheral surface of the die body; and an inclined air injection hole, wherein an upper end of the inclined air injection hole is opened in the inclined surface and a lower end of the inclined air injection hole is opened into a lower portion of the discharge hole so as to inject air downwardly in the discharge hole, wherein the inclined air injection hole is inclined so that an axis of the inclined air injection hole intersects the inclined surface at a substantially right angle. Further, claims 7 and 8 depend from claim 6. HIDEO et al. do not disclose, teach or

suggest, *inter alia*, the newly added recitations of independent claims 4 and 6. Accordingly, because HIDEO et al. do not disclose each and every element of the independent claims, withdrawal of the rejection of claims 4 and 6-8 under 35 U.S.C. §102(b) based on HIDEO et al. is respectfully requested.

For example, referring to Figures 1-3, HIDEO et al. disclose a die button 7 (numeral 6, which was referenced as the die body at page 3 of the Official Action, refers to a thread portion) that is fitted into a button hole 9 of a die plate 8 (*see*, e.g., Figure 2). Similar to KEYES et al., the outer surface of the die button 7 in HIDEO et al. is in direct and contiguous contact with the die plate 8, with the exception of, e.g., the gap 14. HIDEO et al. do not disclose or teach the die button hole 9 in the plate 8 to be provided with a seal member at its upper portion and its lower portion, as recited in, e.g., claim 4. Moreover, since the die button 7 is in direct and contiguous contact with the plate 8, HIDEO et al. do not suggest providing the plate 8 with a seal member at its upper portion and its lower portion.

Furthermore, HIDEO et al. do not disclose or teach an inclined surface formed at an outer peripheral surface of the die button 7 and an inclined air injection hole, wherein an upper end of the inclined air injection hole is opened in the inclined surface and a lower end of the inclined air injection hole is opened into a lower portion of the discharge hole so as to inject air downwardly in the discharge hole, wherein the inclined air injection hole is inclined so that an axis of the inclined air injection hole intersects the inclined surface at a substantially right angle, as recited, e.g., in claim 6. Moreover, HIDEO et al. do not suggest the above noted elements of independent claim 6.

Thus, because HIDEO et al. do not disclose each and every element of the independent claims, Applicant respectfully requests withdrawal of the rejection of claims 4 and 6-8 under 35

U.S.C. §102(b) based on HIDEO et al. Further, dependent claims 7-8 depend from claim 6 and are patentably distinguishable for at least the reasons provided above with respect to claim 6, as well as for additional reasons related to their own recitations.

Regarding the rejection of claims 5 and 9-12 under 35 U.S.C. § 103(a) based on KEYES et al. in view of BEZAMA et al., in addition to there being a lack of reasons for one of ordinary skill in the art to combine the teachings of these two documents, any proper combination of the teachings of these documents would not disclose, teach or suggest a die mounting hole being provided with a seal member at an upper portion and a lower portion which prevents compressed fluid from leaking, as recited in, e.g., claim 4<sup>1</sup>; or an outer piece being fitted into the through hole, as recited in, e.g., claim 9; or an inner peripheral surface of the die body being provided with a hole-forming tool engaging section, as recited in, e.g., claim 10. Claims 11-12 depend from claim 10. KEYES et al. and BEZAMA et al, whether taken alone or in any proper combination, do not disclose, teach or suggest the above noted elements of claims 4, 9 or 10. Accordingly, because any proper combination of KEYES et al. and BEZAMA et al., would not do not disclose, teach or suggest each and every element of the independent claims 4, 9 and 10, withdrawal of the rejection of claims 9-12 (the rejection of claim 5 having been rendered moot upon entry of this amendment) under 35 U.S.C. §103 based on KEYES et al. and BEZAMA et al. is respectfully requested.

For example, referring to FIG-2, KEYES et al. teach a removable die button 25 that is press-fitted into a die retainer 11, 41. KEYES et al. explicitly teach, e.g., at column 3, line 65 to column 4, line 6, that button 25

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<sup>1</sup> Although claim 5 will have been canceled upon entry of this Amendment, claim 4 (from which original claim 5 depended) will have been amended to include the elements of original claim 5.

is formed with a generally cylindrical configuration and is designed to have a length that, when properly inserted, its flat planar ends will lie respectively in the planes defined by the plate surfaces 15 and 16 of plate 11. It will be obvious that by reason of its press fit nature, as an individual die button becomes worn or the character of the work to which the die assembly is applied changes, the die button may be simply replaced.

Thus, KEYES et al. require the two surfaces (i.e., upper and lower surfaces) of the die button 25 to be flush with the planar outer surface 16 and planar undersurface 15, as illustrated, for example, in FIG-2. What's more, the die button 25 is inserted such that its lower face is contact with the planar undersurface 15 of the die retainer.

On the other hand, BEZAMA et al. teach a punch apparatus with improved slug removal efficiency that includes a support bushing 38, which is pressed into a bushing plate 31 of a die plate. The configuration taught by BEZAMA et al. in FIG. 1 requires that a nozzle 27 be inserted into a manifold plate 32, bushing plate 31 and support bushing 38. The support bushing 38 protrudes from the die (or bushing) plate 31 as shown in FIG. 2.

Applicant submits that one of ordinary skill in the art, having the KEYES et al. and BEZAMA et al. teachings before him/her would have been quick recognize that any attempt at combining the two teachings would result in destroying the KEYES et al. invention. For example, to combine KEYES et al. and BEZAMA et al, as suggested in the rejection, would require the introduction of a nozzle 27 (of BEZAMA et al.) into the die apparatus of FIG-2 in KEYES et al. Moreover, the die button 25 (of KEYES et al.) would have to be completely redesigned and made to protrude from the planar outer surface 16. Thus, one of ordinary skill in the art would not have had any reason to combine the two references, as suggested by the Examiner.

Furthermore, even if the KEYES et al. and BEZAMA et al. teachings were to be combined (which, Applicants submits would not have been obvious to one of ordinary skill in the art), the resultant combination would not teach or suggest a die mounting hole being provided with seal sections at both the upper and the lower portions of the mounting hole, as recited in independent claim 4, or an outer piece being fitted into the through hole, as recited in independent claim 9, or a hole-forming tool engaging section as recited in claim 10. As illustrated in FIG. 1 of BEZAMA et al., BEZAMA et al. teach only forming a seal at the upper edge portion 37 of the nozzle 27.

Thus, because one of ordinary skill in the art would not have had a reason to combine KEYES et al. with BEZAMA et al., and/or because any proper combination of KEYES et al. and BEZAMA et al. would not disclose, teach or suggest each and every element of the independent claims, Applicant respectfully requests withdrawal of the rejection of claims 5<sup>2</sup> and 9-12 under 35 U.S.C. §103 based on KEYES et al. and BEZAMA et al. Further, dependent claims 10-12 depend from claim 10 and are patentably distinguishable for at least the reasons provided above with respect to claim 10, as well as for additional reasons related to their own recitations.

Regarding the rejection of claims 1-3 under 35 U.S.C. § 103(a) as being unpatentable over HIDEO et al., upon entry of this Amendment, claim 1 will have been amended to recite a die body being configured to be inserted into a die mounting hole. HIDEO et al., do not disclose, teach, or suggest, whether taken alone or in any proper combination, a die comprising a die body and a core, where the die body is configured to be inserted into a die mounting hole. Accordingly, because HIDEO et al., whether taken alone or in any proper combination, would not disclose, teach or suggest each and every element of the independent claim 1, withdrawal of

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<sup>2</sup> See footnote 1 above.

the rejection of claims 1-3 under 35 U.S.C. §103 based on HIDEO et al. is respectfully requested. Claims 2 and 3 depend from claim 1.

Referring to Figures 1-3, HIDEO et al. disclose a two-element structure, including a die button 7 and a die plate 8, where the die button 7 is insertable into the die plate 8. HIDEO et al. do not disclose or suggest a third element, a core provided in the die body and having a discharge hole, as recited in claim 1.

Thus, because any proper combination of HIDEO et al. would not disclose, teach or suggest each and every element of claim 1, Applicant respectfully requests withdrawal of the rejection of claims 1-3 under 35 U.S.C. §103 based on HIDEO et al. Further, dependent claims 2-3 depend from claim 1 and are patentably distinguishable for at least the reasons provided above with respect to claim 10, as well as for additional reasons related to their own recitations.

Thus, Applicants respectfully request reconsideration and withdrawal of all of the rejections, and allowance of this application to mature into U.S. patent, including claims 1-4 and 6-17.



**SUMMARY AND CONCLUSION**

In view of the foregoing, it is submitted that the rejections under 35 USC § 102 and 103 in the Official Action dated March 23, 2007, should be withdrawn. The present Amendment is in proper form, and none of the documents disclose, teach or suggest Applicant's claimed inventions. In addition, the applied documents of record have been discussed and distinguished, while significant features of the present invention have been pointed out. Accordingly, Applicant requests timely allowance of the present application.

Applicants note that this Amendment is being made to advance prosecution of the application to allowance, and no acquiescence as to the propriety of the rejections is made by the present Amendment. All amendments to the claims which have been made in this Amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

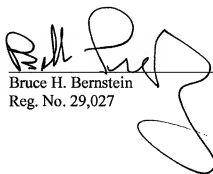
Should an extension of time be necessary to maintain the pendency of this application, the Commissioner is hereby authorized to charge any additional fee to Deposit Account No. 19-0089.

Should there be any questions regarding this paper or the present application, the Examiner is respectfully requested to contact the undersigned at the below-listed telephone number.

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